I49.89:82/47-1/map E12

MMS 86-0011
FWS/OBS-82/47.1

MAP E12

Perry

FLORIDA ECOLOGICAL ATLAS

HYDROLOGY AND CLIMATOLOGY

PERRY, FLORIDA

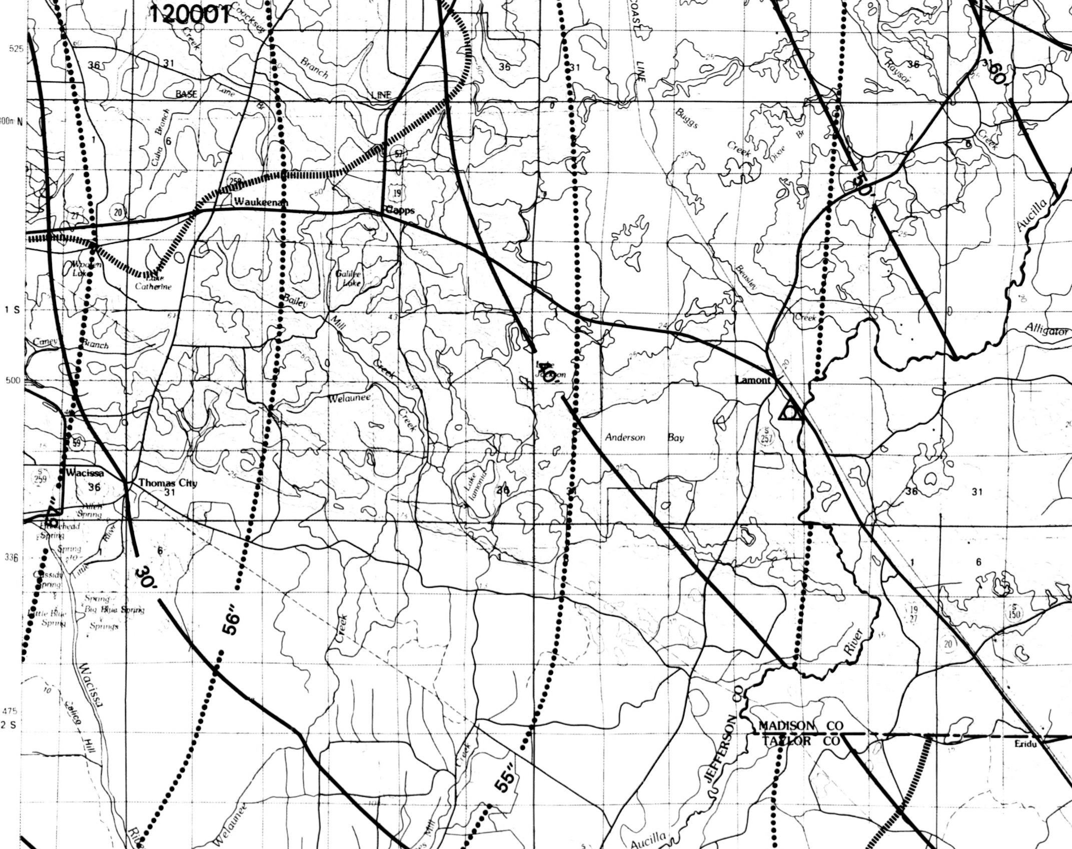
30 X 60 MINUTE SERIES (TOPOGRAPHIC)

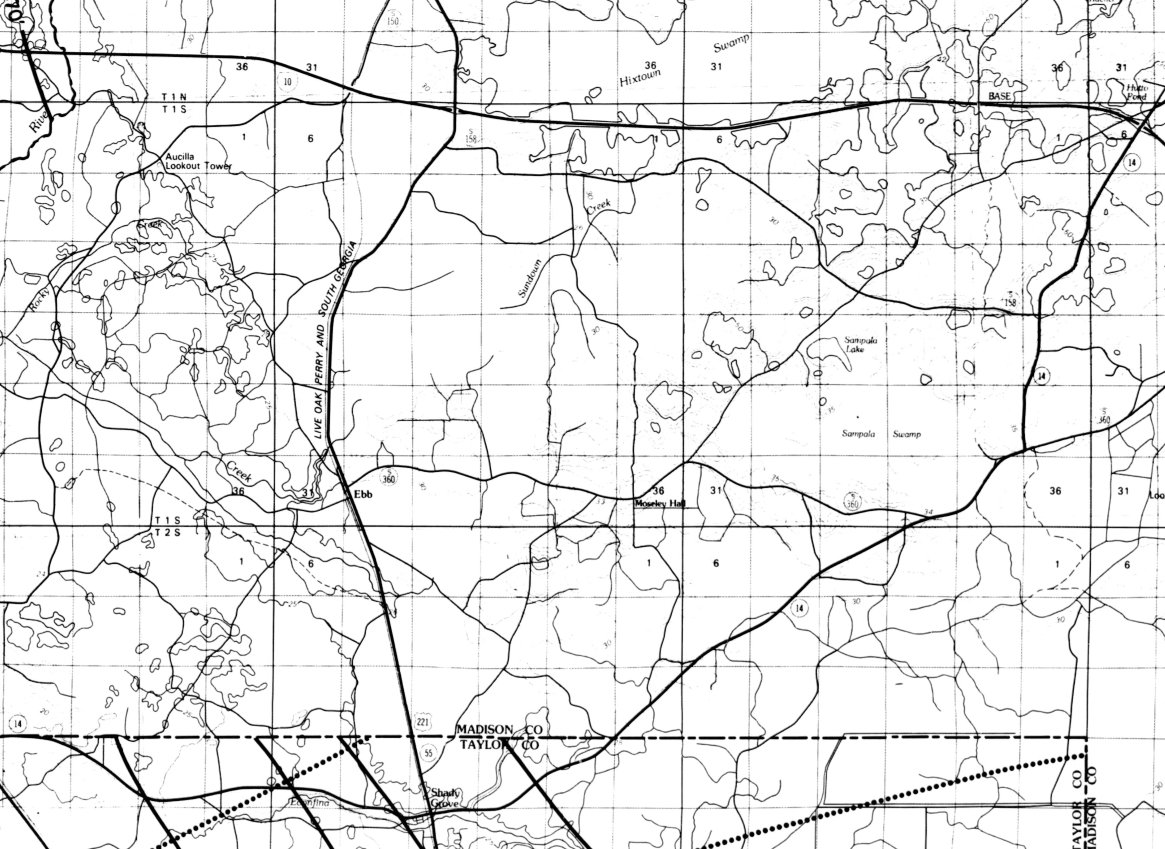
33700

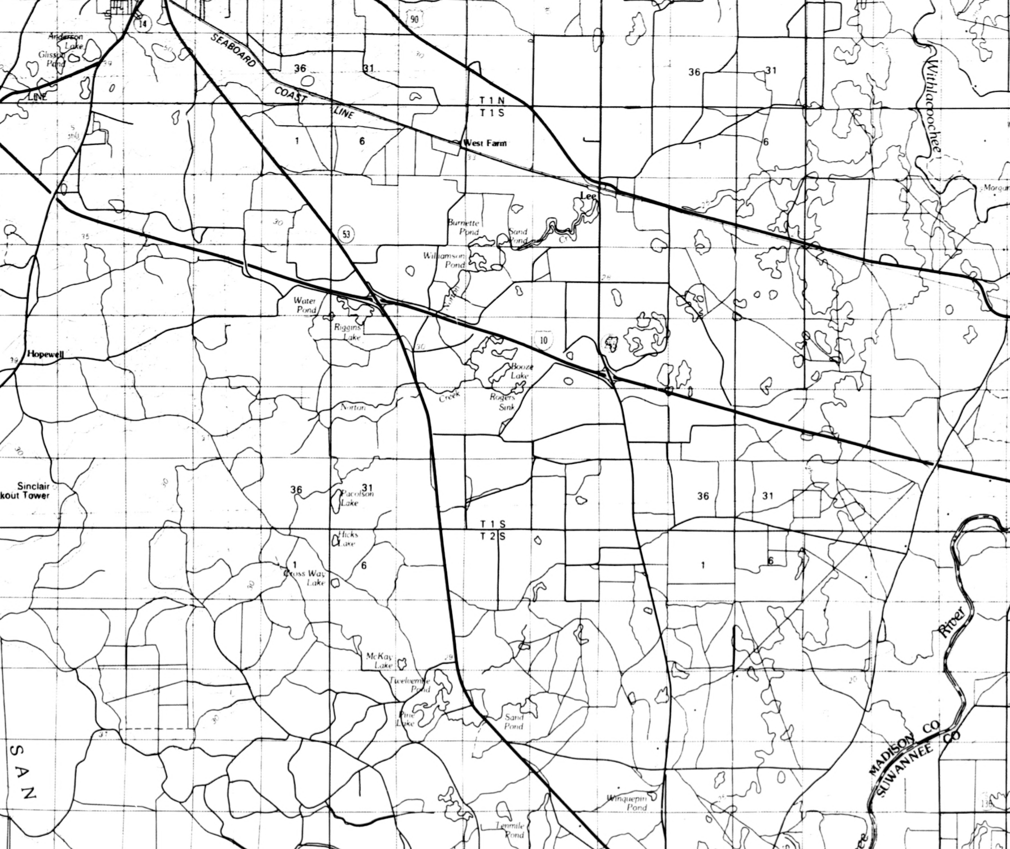
T

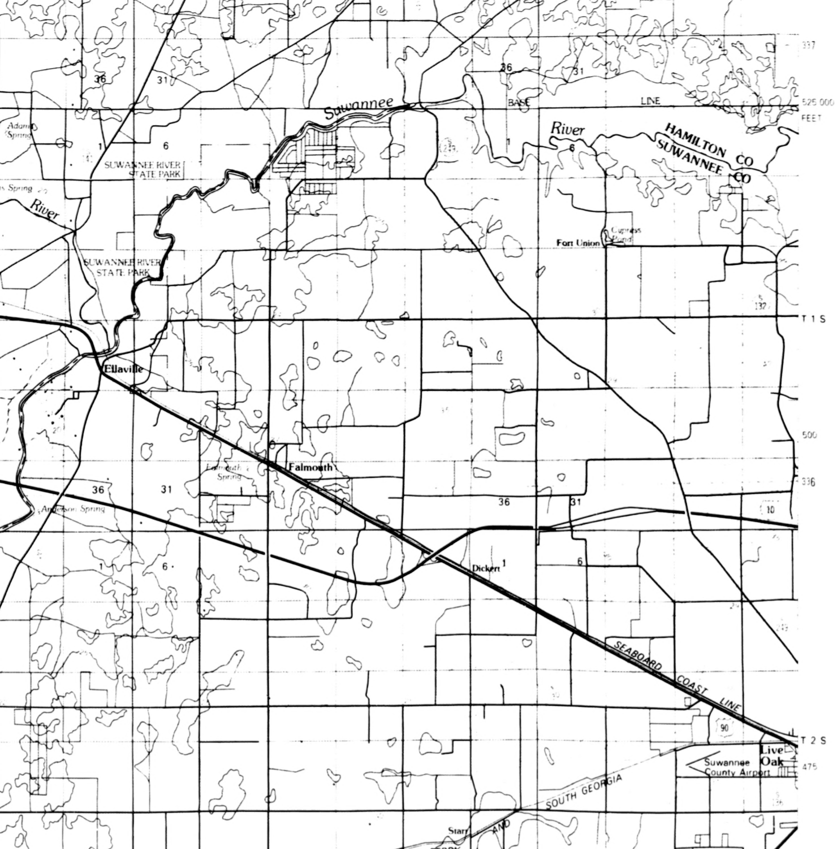
T

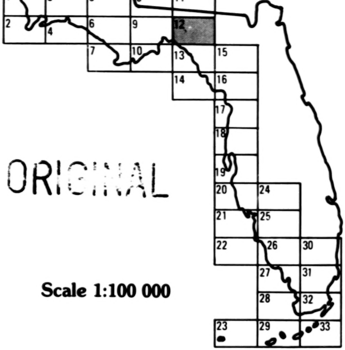
120001


525
300m N
1 S
500
336
475
2 S
36
31
36
31
36
31
Cocksey Creek
Branch
BASE
Lane Br
LINE
Cuba Branch
6
1
COAST LINE
Buggs
Creek
Dixie Br
Raysor
Creek
60'
50'
59
258
19
Waukeenah
Capps
20
27
Wooten Lake
Lake Catherine
Galilee Lake
Bailey
Mill
Creek
Caney Branch
Welaunee
Creek
Beasley
Creek
Aucilla
Alligator
Lake Jackson
40'
Lamont
257
Anderson Bay
Wacissa
259
Thomas City
36
31
Allen Spring
Horsehead Spring
Spring
Cassidy Spring
Little River
Little Blue Spring
Big Blue Spring
Springs
Lake Iamonia
36
31
36
31
1
6
30'
56"
55"
Creek
Wacissa
Calico Hill
River
Welaunee
Mill
Creek
Aucilla
JEFFERSON CO
MADISON CO
TAYLOR CO
Eridu
19
27
150
20
River
50
25
15
10


Rive
150
36
31
10
Swamp
Hixtown
36
31
42
36
31
Hutto Pond
T 1 N
T 1 S
BASE
1
6
158
1
6
1
6
14
Aucilla Lookout Tower
Creek
Creek
Sundown
Rocky
LIVE OAK PERRY AND SOUTH GEORGIA
158
Sampala Lake
14
Sampala Swamp
360
Creek
36
31
360
Ebb
36
Moseley Hall
31
360
36
31
Loo
T 1 S
T 2 S
1
6
1
6
1
6
14
221
MADISON CO
TAYLOR CO
14
55
Shady Grove
Econfina
TAYLOR CO
MADISON CO


14
90
Anderson Lake
Glisson Pond
LINE
SEABOARD
COAST
LINE
36
31
T 1 N
T 1 S
1
6
West Farm
36
31
1
6
Withlacoochee
Morgan
Lee
Burnette Pond
Sand Pond
Cr
53
Williamson Pond
Water Pond
Riggins Lake
Norton
10
Hopewell
Booze Lake
Creek
Rogers Sink
Norton
Sinclair
kout Tower
36
31
Pacolson Lake
36
31
T 1 S
T 2 S
Hicks Lake
1
6
Cross Way Lake
1
6
McKay Lake
Twelvemile Pond
Pine Lake
Sand Pond
29
River
MADISON CO
SUWANNEE CO
Winquepin Pond
Tenmile Pond
SAN
30
25
20


36
31
36
31
337
Suwannee
BASE LINE
525 000 FEET
Adams Spring
1
6
River
HAMILTON CO
SUWANNEE CO
SUWANNEE RIVER STATE PARK
s Spring
River
Fort Union
Cypress Pond
SUWANNEE RIVER STATE PARK
132
T 1 S
Ellaville
500
Falmouth
Falmouth Spring
336
36
31
36
31
Anderson Spring
10
1
6
Dickert
1
6
SEABOARD COAST LINE
90
T 2 S
Live Oak
Suwannee County Airport
475
SOUTH GEORGIA AND
Starr


2
4
6
9
12
7
10
13
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14
16
17
18
19
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24
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22
26
30
27
31
28
32
23
29
33

ORIGINAL

Scale 1:100 000

TOPICAL MAPS IN THIS ATLAS:

- A. BIOLOGICAL RESOURCES
- B. SOCIOECONOMIC FEATURES
- C. SOILS AND LANDFORMS
- D. OIL, GAS AND MINERALS
- E. HYDROLOGY AND CLIMATOLOGY

1984

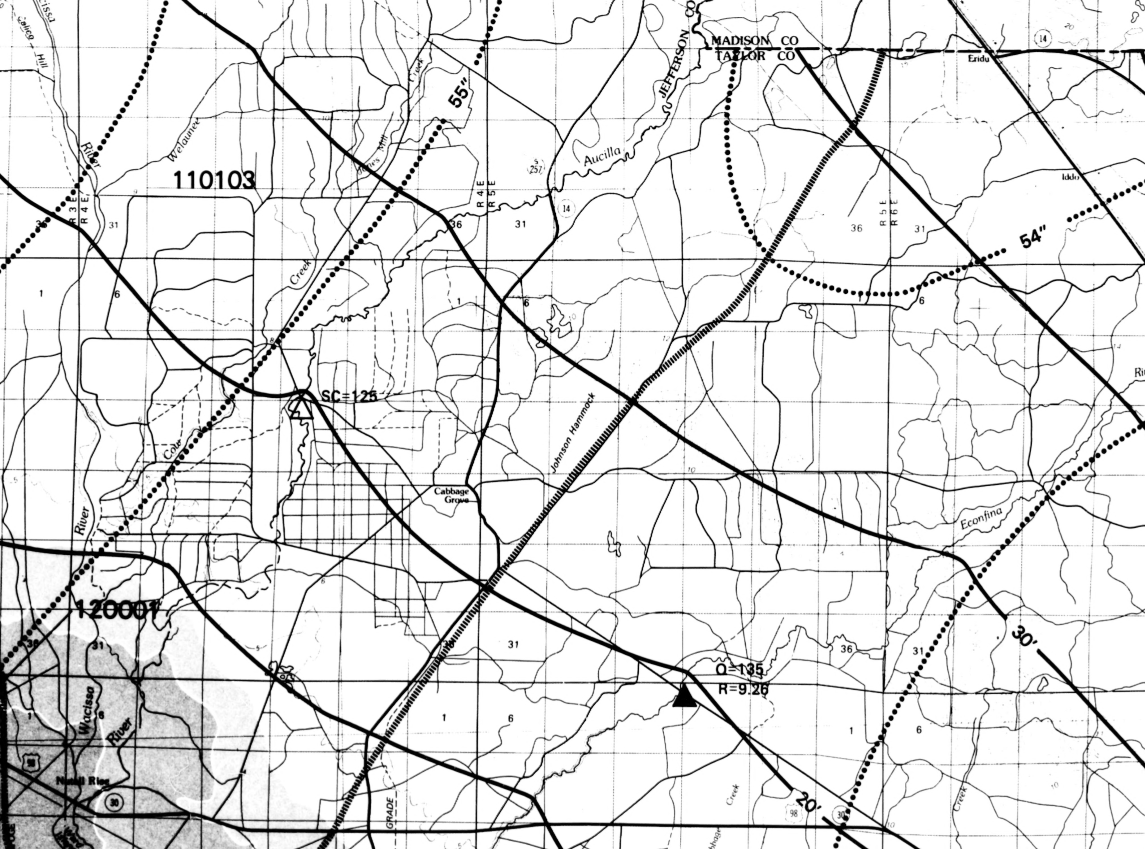
Sa

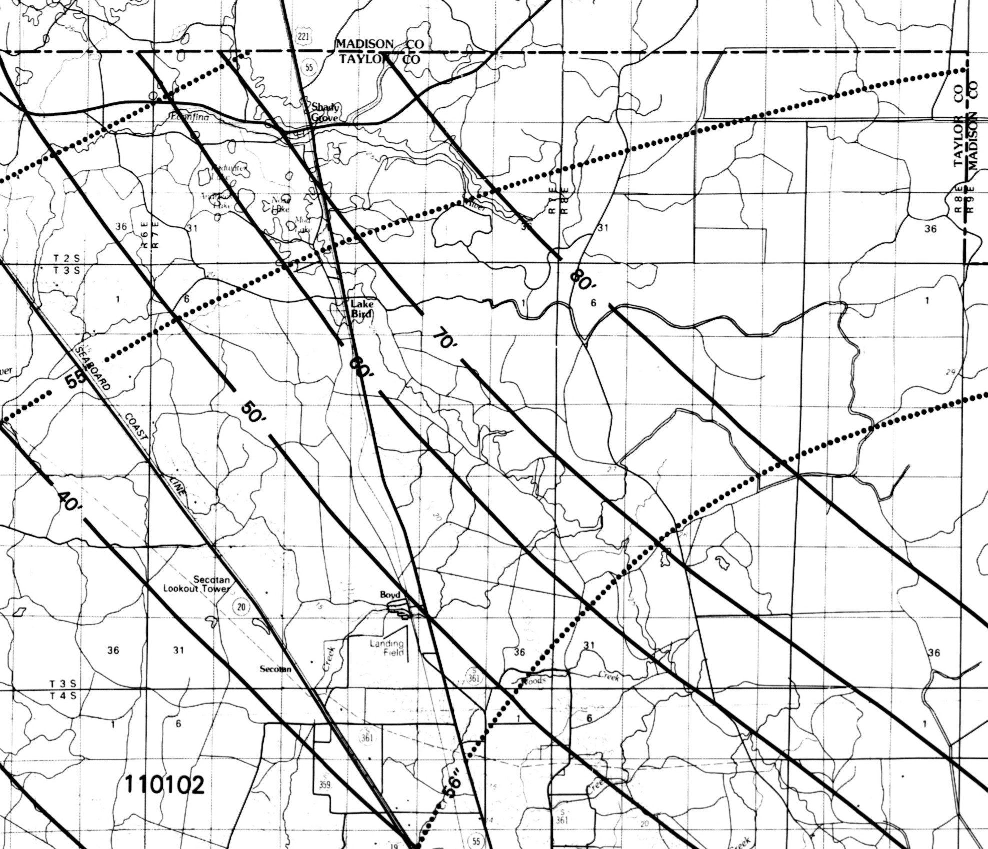
Produced by U.S. Fish and Wildlife
Service and Minerals Management Service

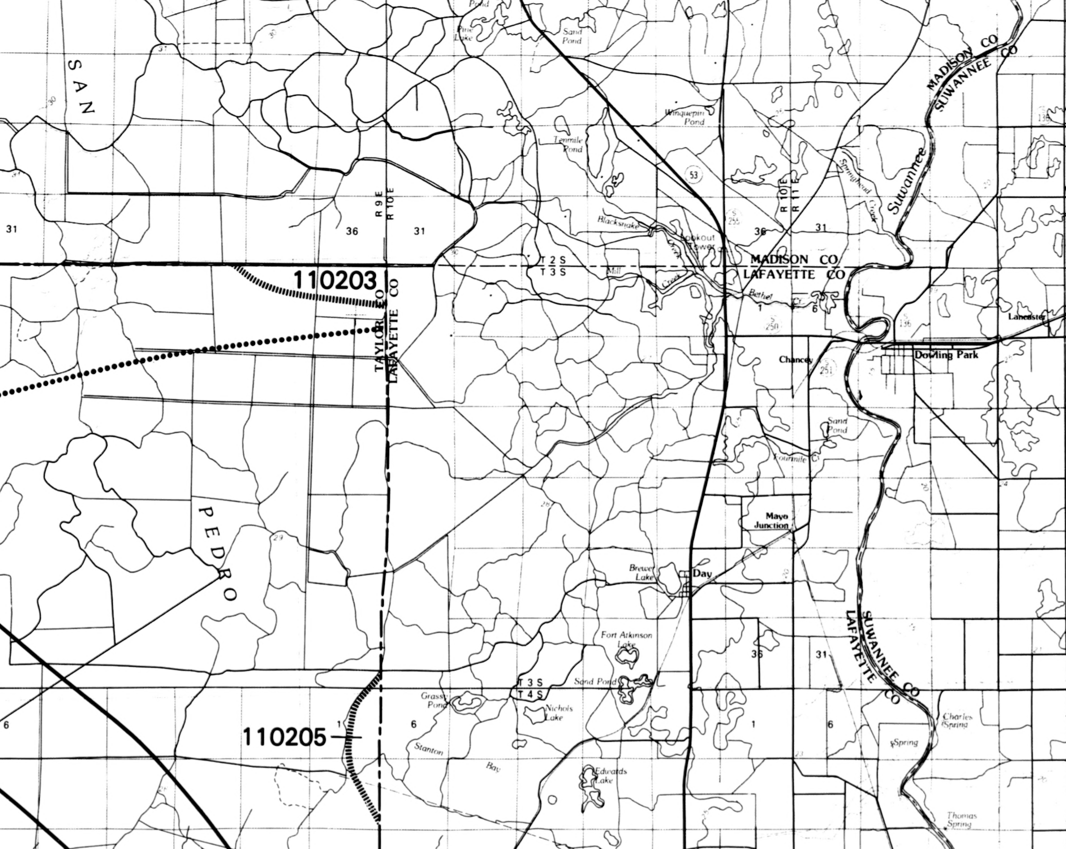
Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, west zone

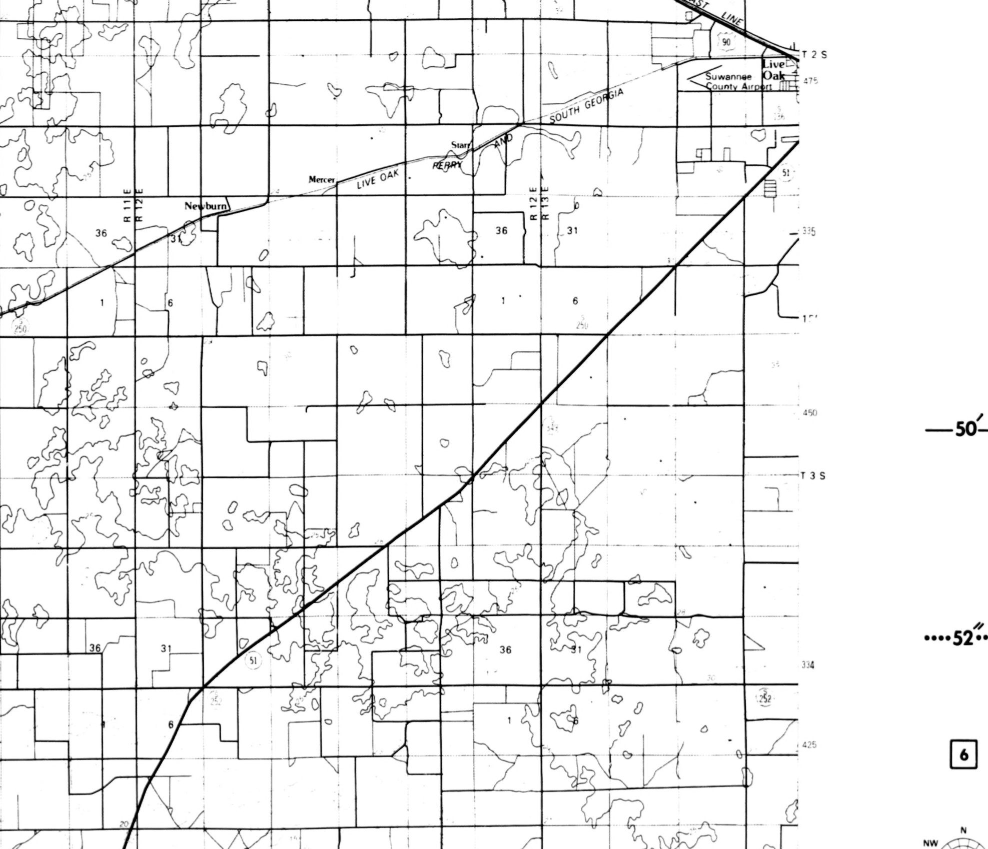
Overlay material compiled in 1983 from

475
T 2 S
Tooles Hammock
15'
450
T 3 S
425
334


MADISON CO
TAYLOR CO
JEFFERSON CO
Eridu
Iddo
14
257
55"
54"
110103
120001
Welaunee
River
Calico Hill
Jones Mill
Creek
Aucilla
R3E
R4E
R4E
R5E
R5E
R6E
36
31
1
6
SC=125
Cow
Creek
Cabbage Grove
Johnson Hammock
Econfina
River
Wacissa
River
Nuttall Rise
30
98
GRADE
Q=135
R=9.26
30'
20'
Creek


MADISON CO
TAYLOR CO
TAYLOR CO
MADISON CO
221
55
Shady Grove
Econfina
Badwater Lake
Andrews Lake
Nose Lake
Mud Lake
River
R 6 E
R 7 E
R 7 E
R 8 E
R 8 E
R 9 E
T 2 S
T 3 S
T 3 S
T 4 S
36
31
36
31
36
31
36
1
6
1
6
1
6
1
6
1
6
1
Lake Bird
SEABOARD COAST LINE
Secotan Lookout Tower
20
Boyd
Landing Field
Secotan
Creek
Woods Creek
Creek
S 361
S 361
S 361
S 359
55
19
29
27
80'
70'
60'
50'
55
40'
56"
110102


Pond
Pine Lake
Sand Pond
SAN
30
31
MADISON CO
SUWANNEE CO
Winquepin Pond
Tenmile Pond
53
Springhead Creek
Suwannee
136
R 9 E
R 10 E
R 10 E
R 11 E
31
36
31
Blacksnake
Lookout Tower
S 255
36
31
MADISON CO
LAFAYETTE CO
T 2 S
T 3 S
Mill
Creek
Bethel Cr
110203
TAYLOR CO
LAFAYETTE CO
1
6
S 250
S 136
Lancaster
Chancey
S 251
Dowling Park
Sand Pond
Fourmile Cr
PEDRO
28
29
Mayo Junction
Brewer Lake
Day
Fort Atkinson Lake
36
31
SUWANNEE CO
LAFAYETTE CO
Sand Pond
T 3 S
T 4 S
Grassy Pond
Nichols Lake
110205
1
6
6
Stanton
Bay
1
6
Charles Spring
Spring
Edwards Lake
Thomas Spring


AST LINE
90
T 2 S
Live Oak
Suwannee County Airport
475
SOUTH GEORGIA
AND
Starr
PERRY
LIVE OAK
Mercer
Newburn
R 11 E
R 12 E
R 12 E
R 13 E
36
31
36
31
335
1
6
1
6
250
250
51
15'
450
T 3 S
36
31
36
31
51
334
252
252
6
1
6
425
20
50′
52″
6
N
NW

Produced by U.S. Fish and Wildlife
Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, west zone

Overlay material compiled in 1983 from latest available data obtained from Federal, State and Local government agencies and other sources.

— **POTENTIOMETRIC CONTOURS OF THE FLORIDAN AQUIFER**

The map represents dry season water levels present in tightly cased wells penetrating the Floridan Aquifer during May of 1980. The contour interval is 5 and 10 feet. Contour lines have been generalized to allow for non-simultaneous water level measurement and variable well depth.

Groundwater flow is down-gradient from potentiometric highs and perpendicular to potentiometric contour lines.
(Measured in feet above mean sea level)

•• **MEAN ANNUAL ISOHYETAL (RAINFALL) CONTOURS**

(1951-1980 National Weather Service Normal Base Period)
The contour interval is 1.0" (refer to narrative for monthly isohyetal maps and for trend evaluation).

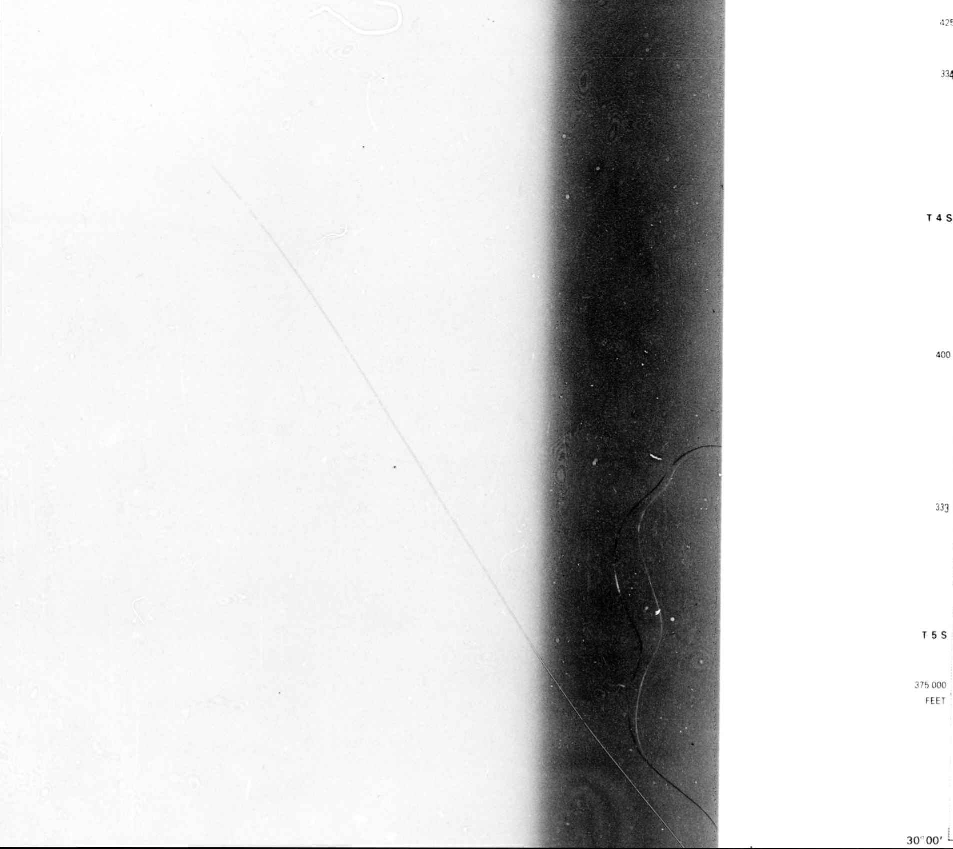
NATIONAL WEATHER SERVICE 30-YEAR CLIMATOLOGICAL STATION

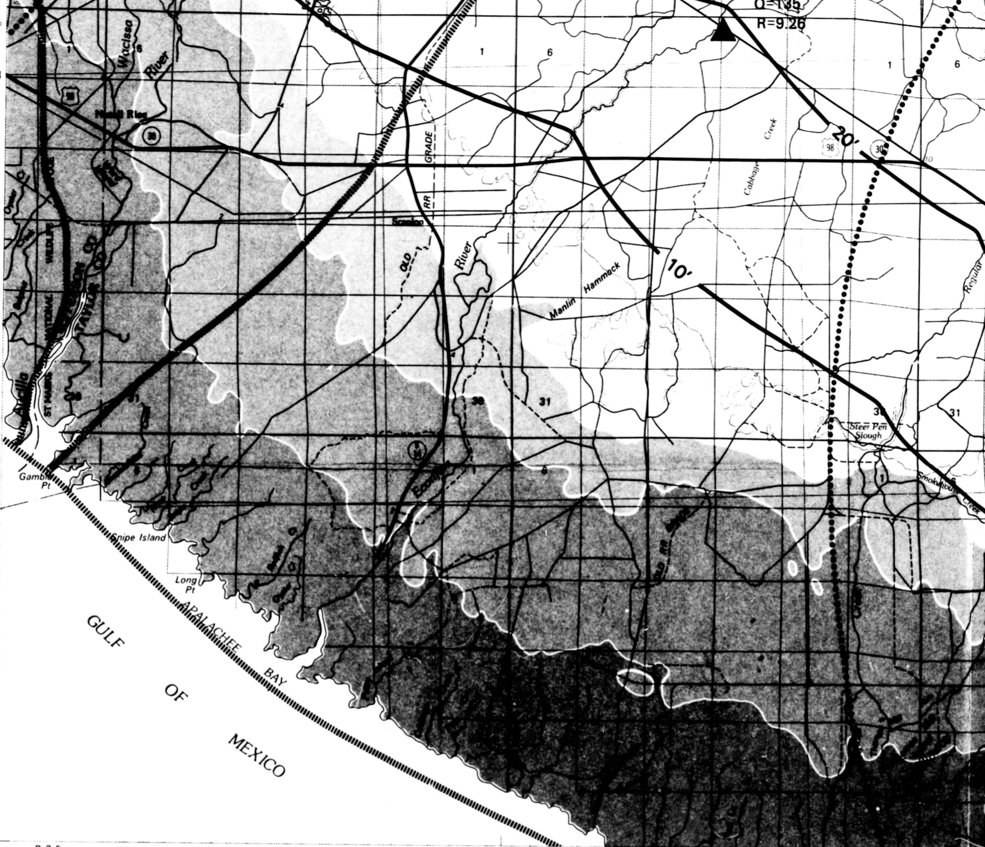
(Number in the box on map refers to station name in supplemental legend'

WIND ROSE STATION

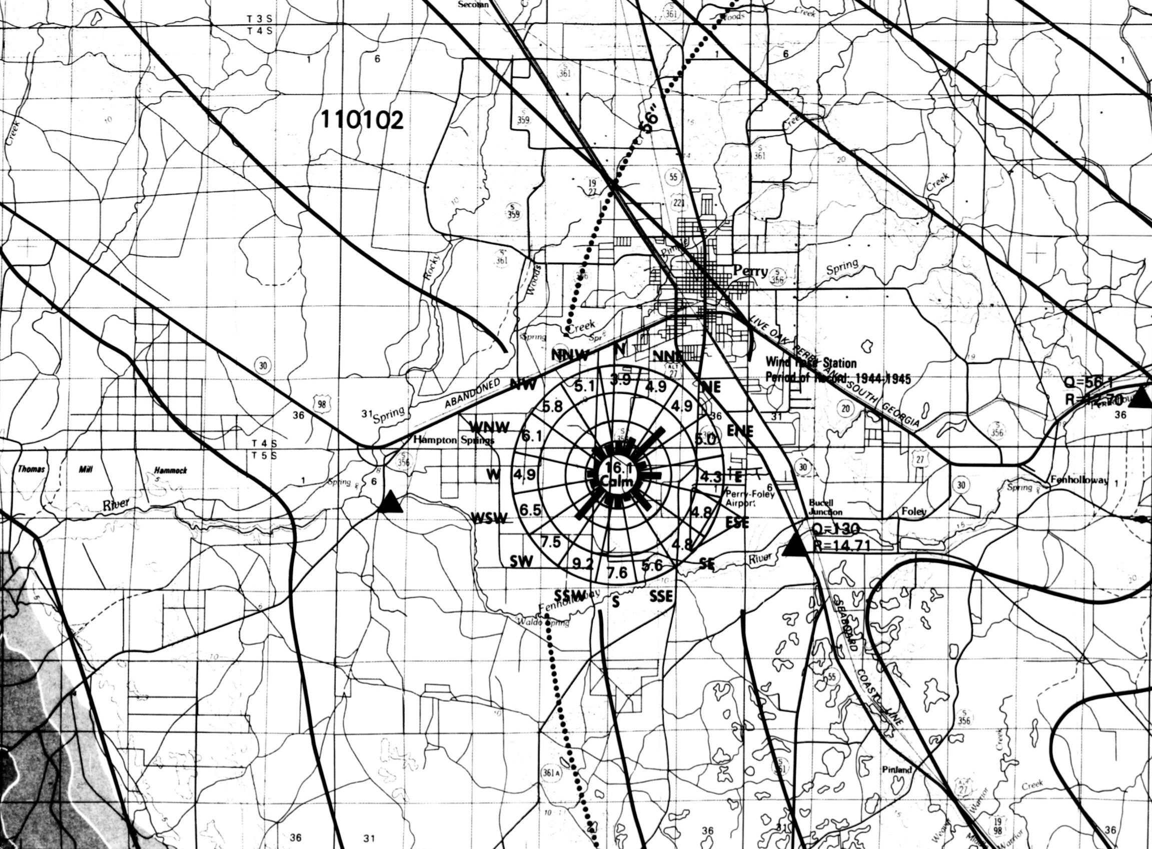
NE

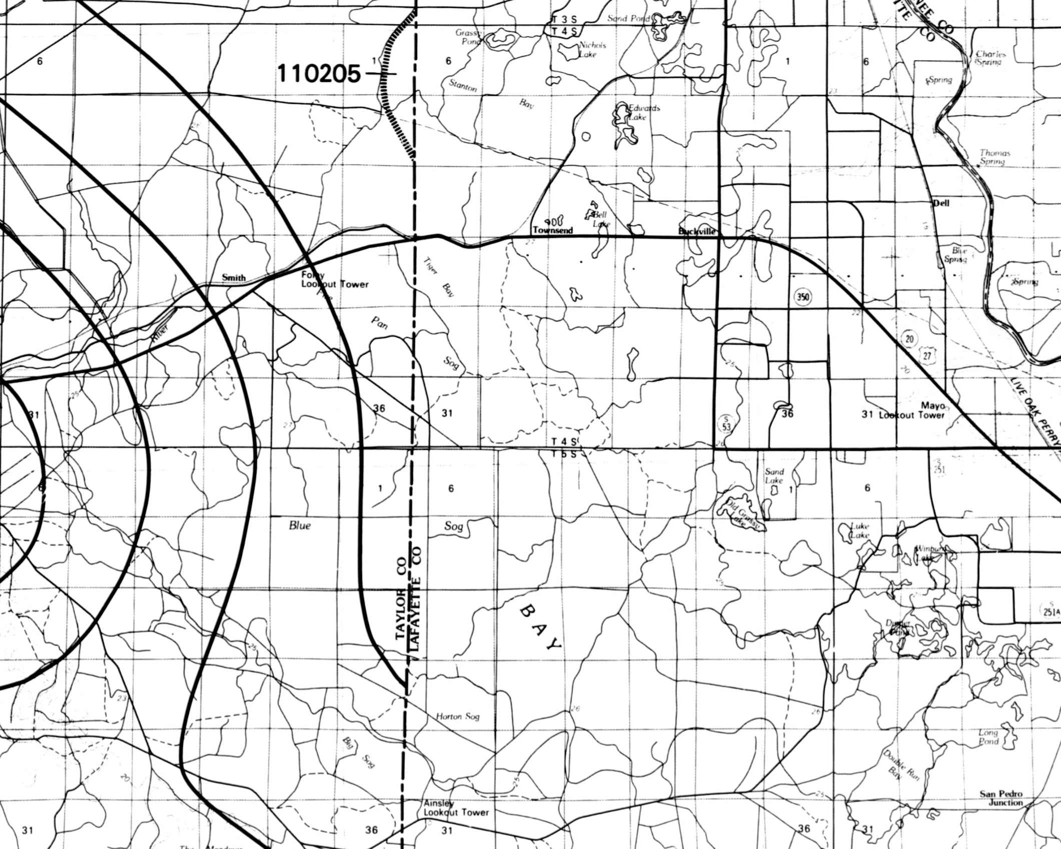
Concentric circles represent 5% frequency interval. The average wind

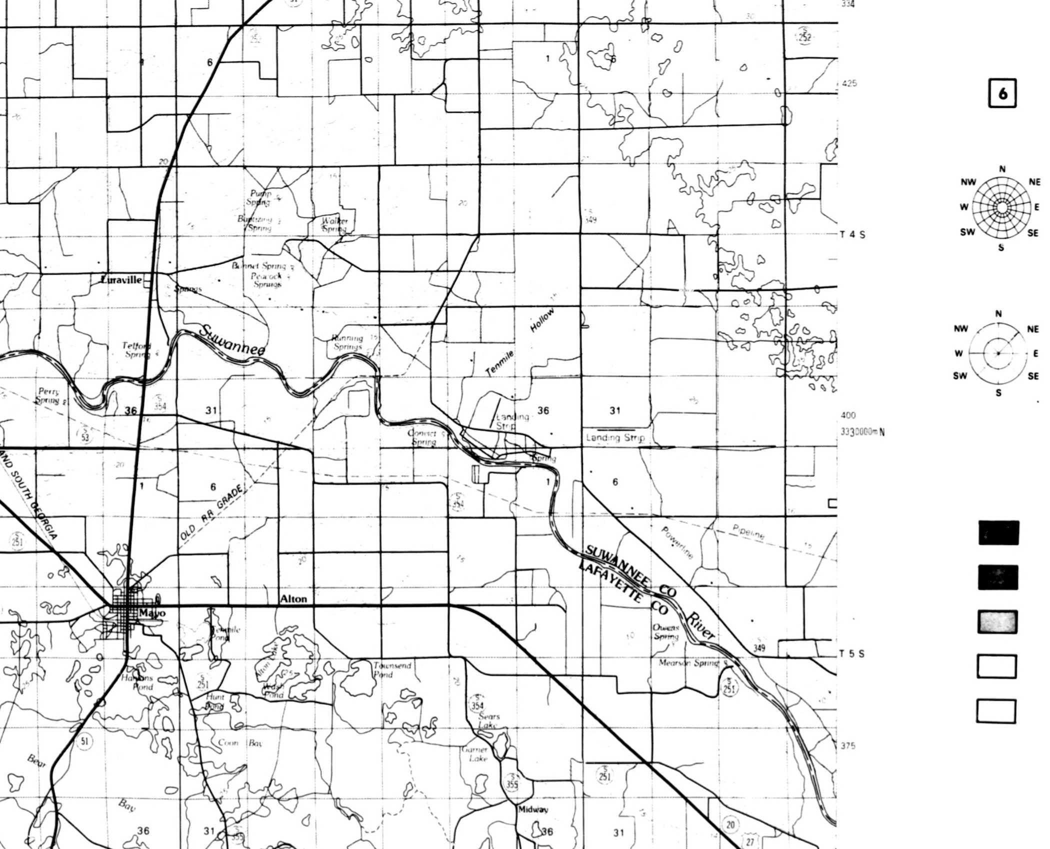

425
334
T 4 S
400
333
T 5 S
375 000
FEET
30°00′



Q=135
R=9.26
Wacissa
River
98
Nuttall Rise
30
1
6
1
6
1
6
GRADE
RR
OLD
Scanlon
River
Cabbage
Creek
98
20′
30
10
10′
Manlin Hammock
Regular
Aucilla
ST MARKS
NATIONAL
WILDLIFE
JEFFERSON CO
TAYLOR CO
36
31
36
31
36
31
Steer Pen
Slough
Smokehouse
Creek
Econfina
14
6
1
Gamble
Pt
Snipe Island
Long
Pt
OLD RR GRADE
GULF
OF
MEXICO
APALACHEE
BAY


110102
T 3 S
T 4 S
T 4 S
T 5 S
Secotan
Woods Creek
56"
Perry
Pimple
Rocky
Woods
Creek
Spring
Spring Creek
Hampton Springs
ABANDONED
LIVE OAK PERRY AND SOUTH GEORGIA
Wind Rose Station
Period of Record: 1944-1945
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
3.9
4.9
4.9
5.0
4.3
4.8
4.8
5.6
7.6
9.2
7.5
6.5
4.9
6.1
5.8
5.1
16.1
Calm
Perry-Foley Airport
Bucell Junction
Foley
Fenholloway
Q=130
R=14.71
Q=56.1
R=12.70
Thomas Mill Hammock
River
Fenholloway
Waldo Spring
SEABOARD COAST LINE
Pinland
Warrior Creek
1
6
31
36
98
30
27
19
55
221
361
359
356
20
361A


110205
T 3 S
T 4 S
Sand Pond
Grassy Pond
Nichols Lake
Stanton Bay
Edwards Lake
NEE CO
TTE CO
Charles Spring
Spring
Thomas Spring
Dell
Townsend
Bell Lake
Buckville
Blue Spring
Spring
Smith
Foley Lookout Tower
Tiger Bay
Pan
Sog
River
350
20
27
LIVE OAK PERRY
Mayo Lookout Tower
S 53
T 4 S
T 5 S
Sand Lake
Old Grassy Lake
Luke Lake
Winburn Lake
S 251
S 251A
Blue
Sog
TAYLOR CO
LAFAYETTE CO
BAY
Dugger Pond
Horton Sog
Big Sog
Long Pond
Double Run Bay
San Pedro Junction
Ainsley Lookout Tower
6
1
6
1
6
31
36
31
36
31
1
6
1
6
31
36
31
36
31



6
N
NE
E
SE
S
SW
W
NW
334
425
T 4 S
400
3330000m N
375
T 5 S
Luraville
Springs
Pump Spring
Baptizing Spring
Walker Spring
Bonnet Spring
Peacock Springs
Telford Spring
Perry Spring
Suwannee
Running Springs
Tenmile Hollow
Landing Strip
Convict Spring
Spring
Landing Strip
SOUTH GEORGIA
OLD RR GRADE
Powerline
Pipeline
SUWANNEE CO
LAFAYETTE CO
River
Alton
Mayo
Tenmile Pond
Alton Lake
Wash Pond
Townsend Pond
Hawkins Pond
Hunt Pond
Coon Bay
Bear Bay
Owens Spring
Mearson Spring
Sears Lake
Garner Lake
Midway
252
349
354
53
251
51
355
20
27
36
31
1
6

([illegible] National Weather Service
Normal Base Period)
The contour interval is 1.0" (refer to narrative for monthly isohyetal maps and for trend evaluation).

NATIONAL WEATHER SERVICE 30-YEAR CLIMATOLOGICAL STATION

(Number in the box on map refers to station name in supplemental legend'

WIND ROSE STATION

Concentric circles represent 5% frequency interval. The average wind speed (mph) is listed in the outer quadrant of each vector direction (Wind rose data represents wind data that has been summarized by the National Climatic Center for Airports, Naval Air Stations and NWS Offices)

OFFSHORE SURFACE CURRENT ROSE

Resultant vectors for each season are shown. The magnitude of each vector is proportional to the velocity. (Concentric circles represent 3 centimeters/second currents)
Vectors defined by the New England Coastal Engineers Computer Model G.A.L.

S	Spring
Su	Summer
FW	Fall/Winter

HURRICANE INUNDATION ZONES

(Maximum areas subject to flooding by Storm Category, as defined by National Weather Service Computer Models)

Category #1 Storm (74-95 mph winds; probability of occurence 1:20 years)

Category #2 Storm (96-110 mph winds; probability of occurence 1:27 years)

Category #3 Storm (111-130 mph winds; probability of occurence 1:83 years)

Category #4 Storm (131-155 mph winds; probability of occurence no historical record)

Category #5 Storm (> 155 mph winds; probability of occurence no historical record)

(Hurricane inundation zones on this map represent generalized areas of maximum areal storm surge flooding by storm category. The scale and detail of this map are meant for planning purposes only. This map is unsuitable for determining the vulnerability of individual buildings to storm surge)

U.S. GEOLOGICAL SURVEY

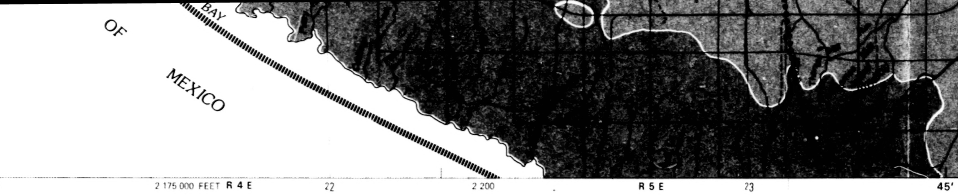
375 000
FEET
30°00′
84°00′
R 3 E

● INTERIOR

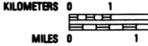
THE FLORID
SERVICE, DI
TEAM (FWS
PLANNERS,
EVALUATE (
WILDLIFE RE
THE STUDY
OKALOOSA,
JEFFERSON
OFFSHORE A
OR PRODUC
JURISDICTIO
THE GEOGR
AGENCIES.

THIS MAP H
INCLUDING
CONTAINED
FEATURES, T
MEASUREM

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6


BAY
OF
MEXICO
2 175 000 FEET
R 4 E
22
2 200
R 5 E
23
45'

—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1980


KILOMETERS 0
1
MILES 0
1

DA ECOLOGICAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE
VISION OF BIOLOGICAL SERVICES, NATIONAL COASTAL ECOSYSTEMS
/OBS - 82/47) AND THE MINERALS MANAGEMENT SERVICE FOR COASTAL
DECISION MAKERS, AND THE GENERAL PUBLIC, TO DETERMINE AND
CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND
EQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY.
AREA INCLUDES THE COASTAL COUNTIES: ESCAMBIA, SANTA ROSA,
, WALTON, WASHINGTON, BAY, CALHOUN, GULF, FRANKLIN, WAKULLA,
, TAYLOR, DIXIE, LEVY, CITRUS AND HERNANDO, AND EXTENDS
APPROXIMATELY 10 MILES. THERE IS NO ATTEMPT, IN THE DESIGN
CTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY
ON OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH
APHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT
.

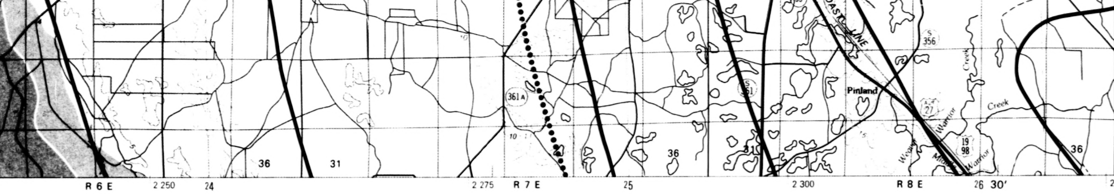
IAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS
MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES
GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED
THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE
ENTS OF DISTANCES OR AREAS.

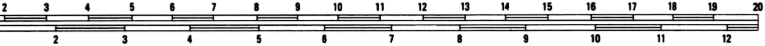
PRIMARY SOURCES OF MAPPED INFORMATION:

HYDROLOGY: Potentiometric Surface of the Floridan Aquifer, Northwest Florida Water Management District, Tallahassee, Florida, 1980.
Potentiometric Surface of the Floridan Aquifer, Suwanee River Water Management District, Live Oak, Florida, 1980.
Potentiometric Surface of the Floridan Aquifer, Southwest Florida Water Management District, Brooksville, Florida, 1981.
Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Model, National Oceanic and Atmospheric Administration, Silver Spring, Maryland, 1981.
Water Resources Data for Florida, U.S. Geological Survey, Tallahassee, Florida, 1979, 1980.
Water Quality Inventory for the State of Florida, Dept. of Environmental Regulation, Tallahassee, Florida, 1982.
Current Atlas of the West Florida Shelf, New England Coastal Engineers, Bangor, Maine. 1982.

CLIMATOLOGY: National Climatic Center, Asheville, North Carolina. 1981.

FOR COMPLETE REFERENCES SEE MAP NARRATIVE


R 6 E
2 250
24
36
31
361 A
10
2 275
R 7 E
25
36
51
2 300
Pinland
356
27
Creek
Warrior
19
98
36
R 8 E
26 30′


2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
2
3
4
5
6
7
8
9
10
11
12

SCALE 1:100 000

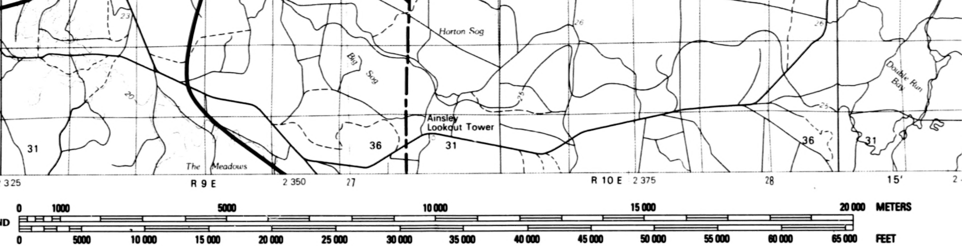
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUN

CONTOUR INTERVAL 5 METERS

CLIMATOLOGICAL STATION NAMES

1. Pensacola FAA Airport
2. Milton Experimental Station
3. Crestview FAA Airport
4. De Funiak Springs
5. Niceville
6. Chipley 3 E
7. Panama City NE

8.
9.
10.
11.
12.
13.
14.



Horton Sog
Big Sog
Double Run Bay
Ainsley Lookout Tower
The Meadows
23
20
26
25
31
36
31
36
31
2 325
R 9 E
2 350
27
R 10 E
2 375
28
15′
0
1000
5000
10 000
15 000
20 000
METERS
0
5000
10 000
15 000
20 000
25 000
30 000
35 000
40 000
45 000
50 000
55 000
60 000
65 000
FEET

Blountstown
Apalachicola Airport
St. Marks 5 SSE
Monticello 3 W
Cross City 2 WNW
Inverness
Brooksville Chinsegut Hill

▨ **U.S. GEOLOGICAL SURVEY HYDROLOGIC UNIT BOUNDARIES (Cont'd)**

- Coastal Area between Ochlockonee and Apalachicola Rivers (130013)
- Ochlockonee River Basin (120003)
- St. Marks and Wakulla Rivers and Coastal Area between Aucilla and Ochlockonee Rivers (120001)
- Aucilla River Basin (110103)
- Coastal Area between Suwannee and Aucilla Rivers (110102)
- Suwannee River Basin below Withlacoochee River excluding Santa Fe River Basin (110205)
- Waccasassa River and Coastal Area between Withlacoochee and Suwannee Rivers (110101)
- Oklawaha River Basin (080102)
- Withlacoochee River Basin (100208)
- Coastal Area from Tampa Bay to Withlacoochee River (100207)

▲ Q=___cfs
R=___in/yr

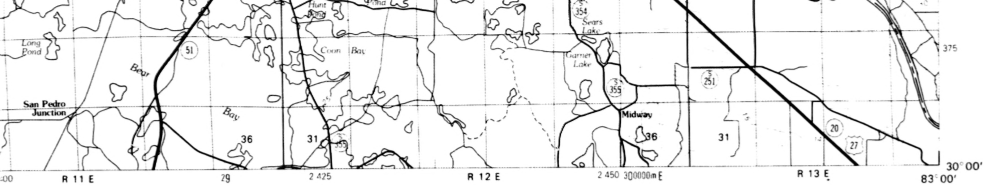
U.S. GEOLOGICAL SURVEY STREAM GAGING STATION

Mean Annual Discharge (cubic feet/second) = Q
Mean Annual Runoff (inches/year) = R

△ SC=___mmhos
Q=___cfs
R=___in/yr

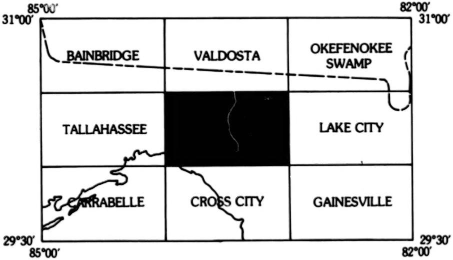
U.S. GEOLOGICAL SURVEY STREAM GAGE AND SURFACE WATER QUALITY STATION

Mean Annual Surface Water Specific Conductivity (micromhos) = SC
Mean Annual Discharge (cubic feet/second) = Q
Mean Annual Runoff (inches/year) = R


Hunt Pond
Pond
354
Sears Lake
Long Pond
51
Coon Bay
Garner Lake
375
Bear Bay
251
355
San Pedro Junction
Midway
36
31
359
36
31
20
27
30° 00′
00
R 11 E
29
2 425
R 12 E
2 450 300000m E
R 13 E
83° 00′

PERRY, FLORIDA
N3000–W8300/30 X 60

1979


85°00′
82°00′
31°00′
31°00′
BAINBRIDGE
VALDOSTA
OKEFENOKEE SWAMP
TALLAHASSEE
LAKE CITY
CARRABELLE
CROSS CITY
GAINESVILLE
29°30′
85°00′
29°30′
82°00′

△ **FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION FIXED SURFACE WATER STATION**

(Insufficient period of record to establish a long term mean)

○ SC= ___mmhos
Cl= ___mg/l

U.S. GEOLOGICAL SURVEY GROUND WATER OBSERVATION AND WATER QUALITY WELL

Mean Annual Ground Water
Specific Conductivity (micromhos) = SC
Dissolved Chloride (milligrams/liter) = Cl

S = ___ ppt

MEAN ANNUAL COASTAL SALINITY

(parts per thousand) = S

STUDY AREA BOUNDARY

▮▮▮▮▮▮▮▮▮▮ Offshore

— — — Inland (County)

—‒‒— Inland (State)

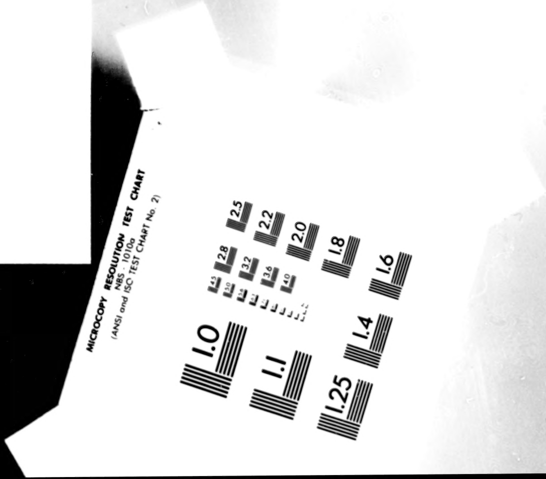
☐ Category #5 Storm (> 155 mph winds; probability of occurence no historical record)

(Hurricane inundation zones on this map represent generalized areas of maximum areal storm surge flooding by storm category. The scale and detail of this map are meant for planning purposes only. This map is unsuitable for determining the vulnerability of individual buildings to storm surge)

U.S. GEOLOGICAL SURVEY HYDROLOGIC UNIT BOUNDARIES

Perdido River Basin (14106)
Perdido Bay, Inflow and Coastal Area (140107)
Lower Conecuh River Basin (140304)
Escambia River Basin (140305)
Blackwater River Basin (140104)
Escambia Bay, Inflow and Coastal Area (140105)
Yellow River Basin (140103)
Choctawhatchee Bay, Inflow and Coastal Area (140102)
Pea River Basin (140202)
Choctawatchee River below Pea River (140203)
St. Andrews Bay, Inflow and Coastal Area (140101)
Chipola River Basin (130012)
Apalachicola River Basin (130011)
Apalachicola Bay Coastal Area and Offshore Islands (130014)

MICROFILMED FROM
BEST AVAILABLE COPY


MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
2.5
2.2
2.0
1.8
1.6
2.8
3.2
3.6
4.0
4.5
5.0
1.0
1.1
1.25
1.4